1   1. (Amended) An interface block that provides an interface between

2   an internal bus and a socket of a logic block, the interface block, the internal

3   bus and the logic block all being located within a single integrated circuit,

4   the interface block comprising:

5   a synchronization module that performs any needed synchronization

6   between a clock domain of the internal bus and a clock domain of the socket

7   of the logic block;

8   a translation module that, for data transferred between the internal

9   bus and the socket of the logic block, provides translation of block encoding of

10   the data;

11   a queue module, that buffers data flowing between the internal bus

12   and the socket of the logic block; and,

13   a driver module that handles low level and electrical drive

14   specifications of the internal bus.

1   7. (Amended) On an integrated circuit, an interface block that

2   provides an interface between an internal bus of the integrated circuit and

3   a socket of a logic block, the interface block comprising:

4   a plurality of modules connected in series, wherein each module in

5   the plurality of modules performs only a single function from a plurality

6   of functions;

7   wherein any needed synchronization between a clock domain of the

8   internal bus and a clock domain of the socket of the logic block is a first

9   function from the plurality of functions, any required translation of block

10   encoding of data is a second function from the plurality of functions, any

11 buffering of data flowing between the internal bus and the socket of the

12 logic block is a third function from the plurality of functions, and

13 handling any low level and electrical drive specifications of the internal

14 bus is a fourth function from the plurality of functions .